



Mountain Microwave

General Description:

MM-RSW-180420-SP2T is an reflective, single pole, single throw pin diode switch that operates over the 18.0 GHz to 42.0 GHz Frequency range. This model offers 60 dB Typical isolation, 20 ns typical switching speeds, and is outfitted with removable 2.92mm connectors.

Features:

- Ultra Wide Band: 18.0-42.0GHz
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- TTL compatible driver include
- Unconditionally stable

Applications:

- 5G Systems
- Radar Systems
- Communication Systems
- Automatic Test Equipment
- Switching Network

Electrical Specifications (23° C):

Parameter	Value			Units
	Min	Typ	Max	
Frequency Range	18		42.0	GHz
Insertion Loss			3.5	dB
Isolation	60			dB
Input VSWR		1.5	2.2	:1
Output VSWR		1.5	2.2	:1
Switch Speed		20	25	ns
Power Handling			20	dBm
Bias Voltage		± 12		VDC
Bias Current		100/100		mA
Control Logic TTL		0/+5		V

Absolute Maximum Ratings:

Condition	Value
DC Voltage	± 12V (± 5%)
Maximum Input Power(CW)	+20 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

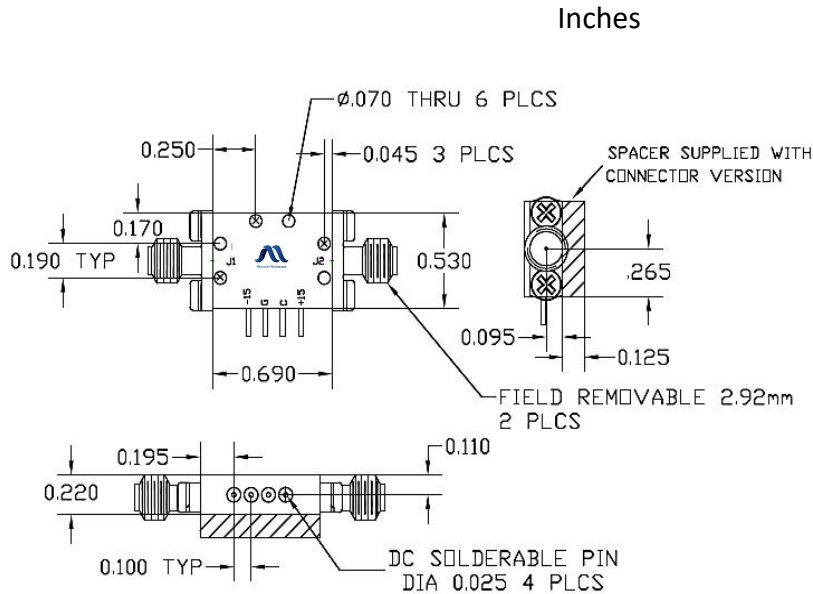
Mechanical Specifications:

Parameter	Value
Length	17.5 mm
Width	13.5 mm
Height	8.7 mm
RF Connector	2.92mm Female



Mountain Microwave

Outline Drawing:



Truth Table	
TTL Control Input	Signal Path State
C1	
0	J1-J2
1	OFF

Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		-45°C~+85°C
Storage Temperature		-55°C~+125°C
Random Vibration	MIL-STD-883K, Method 2026, Cond. IB	50 - 2000 Hz, 7.3 Grms
Humidity	MIL-STD-202, Method 103B, Cond. B	100% RH at 35c, 95%RH at 40°C
Altitude	MIL-STD-883K, Method 1001, Cond. C	50,000 feet

Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.